



# ASSESSMENT OF PERCEIVED STRESS AMONG FIRST YEAR POST-GRADUATES IN A GOVERNMENT MEDICAL COLLEGE OF NORTH COASTAL ANDHRA PRADESH

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## ABSTRACT

**Introduction:** Stress is an external constraint which upsets individual mentally and physically. Stress has increased significantly in recent years. A united nation report labelled stress as "The 20<sup>th</sup> century epidemic". Medical education is inherently demanding and stress full, researchers have shown that postgraduate doctors are under high level of stress due to work overload, time pressure to meet deadlines, work demands affecting personal and home life. This is of importance because there are reports of post graduates committing suicide and is known that quality of care that the physicians give is directly related to their own health. **Objective:** To assess the perceived stress among first year post graduates. **Methodology:** An Analytical Cross-sectional study was done among postgraduates. Perceived stress scale by Sheldon Cohen was used for this study. Based on their scores post graduates were categorized as mild, moderate and severely stressed. **Result:** Majority of the subjects belong to age group 24-29 years. 18% subjects perceived low stress, 62% subjects perceived moderate stress, 20% subjects perceived high stress. **Conclusion:** Nearly 80% Moderate to severe perceived stress was observed among First year post graduates. There is a need for focused stress management programs to incorporate healthy coping strategies in postgraduate medical students.

**KEYWORDS:** Perceived Stress, Post Graduate Students, Clinical Non-clinical Departments.

## INTRODUCTION:

Stress is the mental and physical response and adaptation by our bodies to the real or perceived changes and challenges in our lives. A stressor is any real or perceived physical, social, or psychological event or stimulus that causes our bodies to react or respond.

Medical education is inherently stressful and demanding.<sup>1</sup> Postgraduate medical students (medical residents) usually have long working hours, need to face various clinical emergencies, and also have academic as well as research works in their training period. Hence, they are vulnerable to suffer from stress and related disorders.<sup>2</sup>

Chronic stress in medical professionals may have a negative impact on learning, performance, problem-solving and decision-making abilities, and ultimately patient care. It leads to a predisposition to medical illnesses, such as cardiovascular disorders, peptic ulcers, asthma and many more, which is a well-known fact. Any stress if left unattended can lead to burn out and can predispose the individual to psychiatric disorders such as depression and anxiety, substance use, and even suicide. Incidence of suicide among young medical professionals is showing an upward trend.<sup>3</sup> Hence, addressing to stress-related psychological problems in medical residents is a necessity of the hour.

This study is an attempt to increase the awareness about stress faced by postgraduate medical students and their ways of dealing with it

## OBJECTIVE:

To assess the perceived stress among first year postgraduates

## MATERIALS AND METHODS:

**Study Design:** Cross-sectional Analytical study

**Study Setting:** Andhra Medical College

**Study Population:** First Year Postgraduates.

**Sample Size:** 103 post graduates  $n = z^2 \cdot \frac{1-\alpha}{2} \times (1-\alpha) / \times 2$ ,  $\alpha = 0.05$ ,  $p = 0.4$ ,  $d = 0.1$

**Sampling Technique:** simple random sampling

**Inclusion Criteria:** First year postgraduates who were willing to participate in study.

**Exclusion Criteria:** First year postgraduates who are not willing to participate in the study, students with pre existing psychiatric illnesses

**Study Period:** one month, 2019

**Study Tools:** The study tool was structured self-administered questionnaire. It

had two parts:

1. Socio-Demographic details include name, age, gender, marital status, department.
2. Perceived Stress Scale by Cohen

Cohen's Perceived Stress Scale (PSS-10) (1983) was used to assess the perceived stress of the students. The Perceived Stress Scale (PSS), 10-item scale was administered to assess the perception of stress in the residents. It is a measure of the degree to which situations in one's life are appraised as stressful. The questions in the PSS ask about feelings and thoughts during the last month. The respondents answer each PSS question on a Likert scale (never, almost never, sometimes, fairly often, or very often).

## Ethical Considerations

Institutional ethics committee clearance was obtained.

Informed consent was obtained from the participants.

## Study Variables.

**Independent Variables:** Socio-Demographic characters (age, gender, marital status)

**Dependent Variables:** Perceived stress scores

## RESULTS:

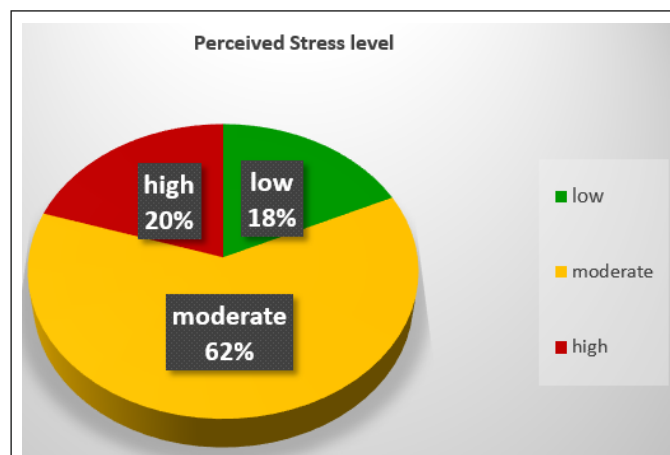


Figure 1: Distribution of study subjects by level of perceived stress

A total of 103 first year post graduate students were included in the study. Out of which males were 36 (35%) in number and females 67(65%). Age ranging from 24 to 43 but most of them were in the age group of 24 to 26 mean age was 25.87  $\pm$  2.91.

Mean perceived stress scores 20.38, SD  $\pm$  6.82. Majority 62 (60%) of the study subjects had moderate perceived stress, 21 (20%) of study subjects had high perceived stress, 17 (18%) had low perceived stress.

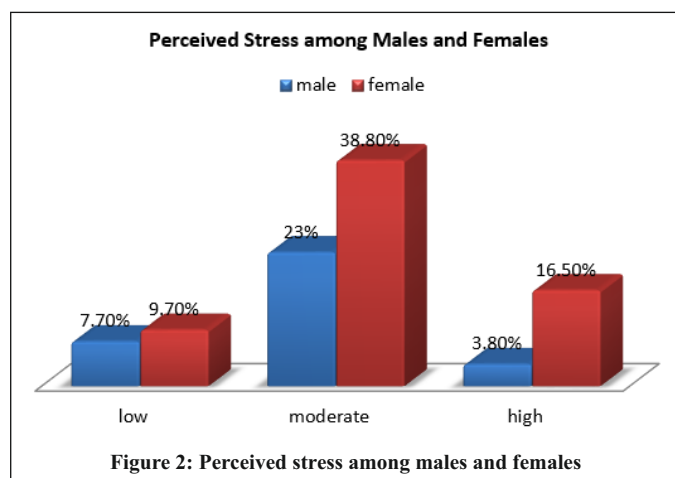


Figure 2: Perceived stress among males and females

The proportion of males with low perceived stress is 8(7.7%) and females is 10(9.7%); 24(23%) males 40(38.8%) females had moderate perceived stress and 4(3.8%) males, 17(16.5%) females had high perceived stress.

Female PG'S perceived more stress (38% in females > 23% in males) but it is statistically insignificant p value = 0.4

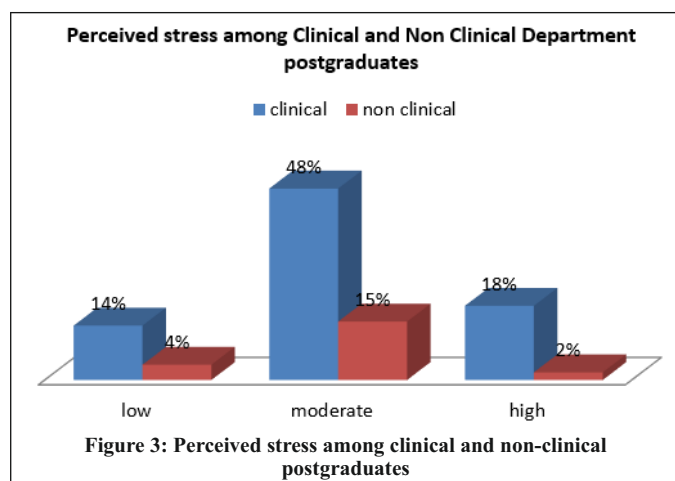


Figure 3: Perceived stress among clinical and non-clinical postgraduates

Majority 49(48%) of the postgraduate of clinical department perceived moderate stress compared to non-clinical dept 15(15%); 14 (14%) clinical dept 4(4%) non clinical dept post graduates had low perceived stress; 19(18%) clinical dept, 2(2%) non clinical dept post graduates had moderate perceived stress. There was no significant difference of perceived stress scores between the clinical and non-clinical dept pg's p value = 0.7

#### DISCUSSION:

In this study 80% of post graduate students had moderate to high perceived stress. Similarly Gobbur et.al showed that prevalence of perceived stress seems to be high among post graduate medical students (1); Maswadi et al. showed that majority of the medical residents (73%) had moderate level of stress, 18% of the medical residents had high level of stress, and 9% had mild level of stress (4). The average PSS score differed significantly according to gender. N.K Saini et al showed that out of 930 resident doctors, (17.7%) had mild stress, (12.2%) had moderate stress, and (2.9%) were severely stressed. (2)

In the present study female PG'S perceived more stress (38% females > 23% males) but it is statistically not significant p value = 0.4. whereas stress level was significantly higher among females according to Maswadi et al. (4)

In this study the post-graduates were classified into clinical and non-clinical departments in which Majority (48%) of the postgraduate of clinical department perceived moderate stress compared to non-clinical dept (15%) and there was no significant difference (0.4)

A study by M.K Swami et al showed that there was no significant difference in Mean scores SD of Perceived stress between Medicine residents 18.28  $\pm$  (5.47) and Surgery residents 17.22 (3.52) with a p value of 0.39. (5)

Rahul Bansal et al. showed that about 76.7% of male surgical residents had low perceived stress scores whereas 40% of female surgical residents had moderate perceived stress scores, which was statistically significant ( $P = 0.01$ ). Among nonsurgical residents, 83.3% males and 40% females had moderate perceived stress levels and was statistically significant ( $P < 0.00$ ). (3)

#### CONCLUSION:

Nearly 80% postgraduates perceived moderate to severe stress.

Postgraduate medical students with higher levels of perceived stress have higher self-reported psychological morbidity. The findings indicate need for regular stress management programmes for postgraduate medical students with focus on inculcating healthy coping strategies. This will help enhance their physical and psychological wellbeing and improve productivity. Creating a healthy environment in the department, appreciation of efforts and motivation is very much essential. Policies and Regulations in Post graduate medical education which can reduce risk and stress in residents like increasing the number of PG seats, decreasing number of working hours, is the need of the hour.

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